

THAMES WATER MAINS REPLACEMENT WORKS

**Interim Report 34: CROUCH HILL 55,
City of London & London Borough of Tower Hamlets
(August 2010-November 2011)**

including

**The recording of exposed remains of Aldgate on Aldgate
High Street**



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November 2011

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The recording of exposed remains of Aldgate on
Aldgate High Street

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Abstract

This document forms an interim report for the monitoring of Thames Water mains replacement works within the Crouch Hill 55 area between August 2010 and November 2011. In most areas these groundworks exposed little in the way of significant archaeology, revealing occasional remnants of brick walls and arched ceilings interpreted as 19th century coal cellars, along with accumulated post-medieval made-ground deposits.

However, on the 3rd February 2011 a large segment of apparently N-S aligned brick and stone wall was revealed in the north section of a trench aligned E-W across the junction of Jewry Street and Aldgate High Street. The brickwork is thought to have been related to the 17th century Aldgate which once stood within the immediate vicinity. The structure was found 0.63m below the existing ground surface and survived to at least 0.97m in height, continuing beneath the base of the excavation.

This report details the discovery and attempts to place the findings within their historical and cartographic context, as well as giving a summary of works and observations elsewhere within the CH55 area.

Further segments of N-S, rubble built, walls were located on Aldgate High Street at the junction of Minories, and on the western side of Mansell Street extensive brickwork remains of coal cellars and basements were exposed and recorded. In trenching along East Smithfield half a fragment of medieval floor tile was recovered from backfill material and was linked to the neighbouring Abbey of St Mary Graces.

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I THE RECORDING OF EXPOSED REMAINS OF ALDGATE ON ALDGATE HIGH STREET

1 Introduction

- 1.1** This section of the report focuses on the excavation and recording a part of the remains of Aldgate uncovered on the 3rd February 2011. The site lies on the southern side of a Scheduled Ancient Monument, (LO26K), which reflects the line of London Wall and the site of Aldgate.

The groundworks formed part of the programme carried out by Optimise on behalf of Thames Water and fell within the Victorian Mains Replacement area Crouch Hill 55, the City of London and London Borough of Tower Hamlets, EC2. The remains were located within a trench in the southern carriageway of Aldgate High Street by the junction with Jewry Street, (fig.1).



Fig.1: Location of trench containing remains associated with Aldgate, (modified from OS Map provided by Thames water)

2 Archaeological and Historical Background¹

- 2.1 There has been an entrance into the City on this site since Roman times, with the original Aldgate forming the easternmost entrance into the city of Londinium. It opened out onto the main east-west road heading from the Forum towards Colchester.

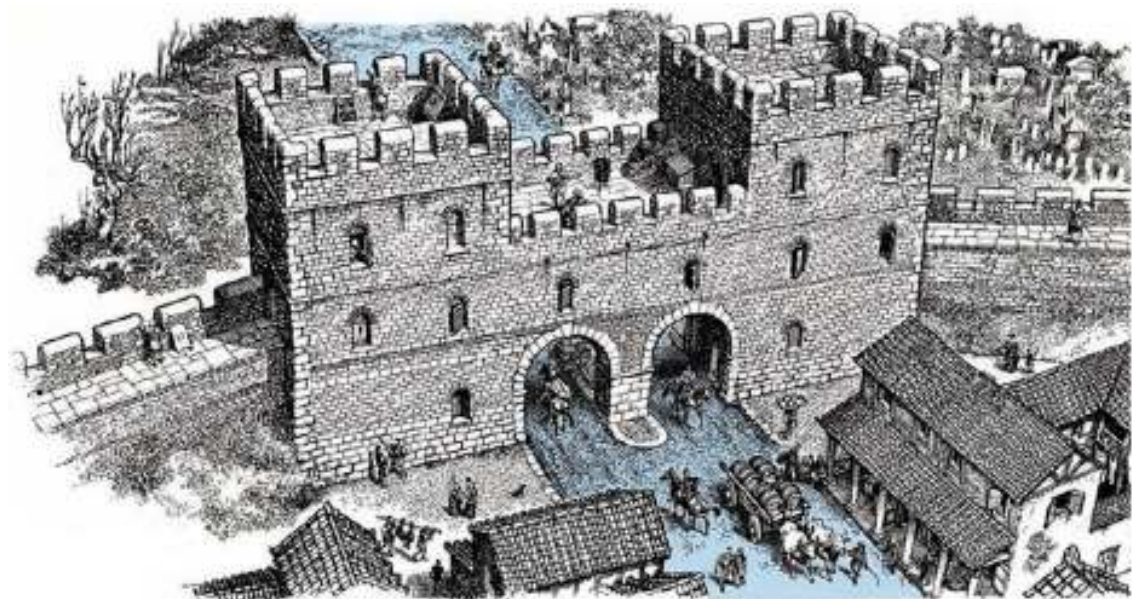


Fig.2: Artist's impression of Roman Aldgate, 3rd century AD

Remains of this road, along with the Roman City Wall and associated gateway have been unearthed several times between the early and late 20th century. These include Guildhall Museum sites GM7, GM9 and GM353. GM7 was the site of the post office building on the corner of Aldgate Street and revealed 4 phases of the northern gate tower, dating from between the Roman period and 17th century. The Roman tower was square and extended 3m east from the wall, with a 3m wide ditch on the exterior side. A 40ft long section of wall, was exposed at a depth of 8ft 6inches below the modern ground surface in 1905, (GM353), and an extension to the Aldgate East tube station in 1938, (GM9), unearthed several sections of the Roman road 10ft below ground and directly overlying the virgin clay. A nearby brick-built structure was interpreted as a possible roadside tomb as was common practice in the Roman period.

Further elements of intramural side streets have been unearthed along Jewry Street and Fenchurch Street, (AHS98, CAS75, and FCS87)

¹ All site codes refer to those provided on the London Archaeological Archive Resource Centre (LAARC) website

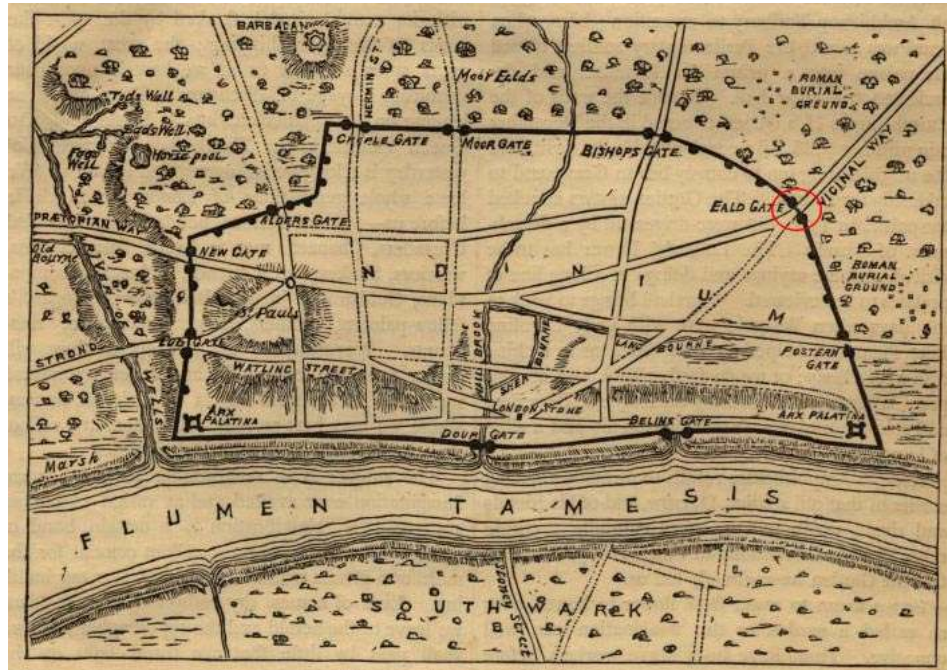


Fig.3: An engraving of Roman London from 1879 Eald Gate circled in red

- 2.2 The site of the Roman town was largely abandoned during the Saxon period, when the main settlement of Lundenwic was established further west, in the modern day Aldwych, Strand, Covent Garden area. It was not until the Viking raids, and English reconquests, of the 9th century that Alfred the Great re-established 'Lundenburh' within the neglected Roman city walls. Alfred's grandson Athelstan permitted 8 royal mints to be established here in the 10th century, indicating its subsequent wealth and development.

Evidence of Saxon activity in the area is therefore limited to 'dark-earth' deposits found during the CAS75 excavations by the Department of Urban Archaeology in 1975 at 37 Jewry Street and 87-89 Aldgate High Street. This 'dark-earth' is believed to illustrate the area of the former Roman City having been abandoned or utilised for agricultural purposes, creating a humic, largely sterile deposit blanketing the site and burying underlying Roman stratigraphy. This is known to have taken place in several major Roman towns after the end of Roman occupation in the mid-5th century.

There have been several interpretations as to the origin of the name Aldgate. The version used today was not used until the late 1480s, and previous variations included 'Eald Gate', 'Al Gate', 'Ale Gate', and 'All Gate'. These refer to: individuals, a Saxon named 'Eald', a derivative of the word for foreigners 'Al', nearby pubs, 'Ale', or the importance of the gate as a city entrance as in 'All' people could pass through. The current form of Aldgate may simply derive from Old Gate.

2.3 Elements of the early and later medieval city walls and gate were investigated in 1967, during the same excavation that exposed the Roman gate tower, (GM7). The earlier medieval phase had a square shaped tower constructed from ragstone and projecting 1.5m east of the wall. A substantial, possibly V-shaped, exterior ditch, 2.5m deep was also sectioned, producing pottery of a 12th to early-13th century date. It is thought that these fills and the tower may represent a phase of rebuilding in 1215. When the baronial forces were on their way to meet with King John at Runnymede it is said that it was in such a state of disrepair that the Earls of Essex and Gloucester ordered it be rebuilt, the stonework being looted from nearby Jewish properties and monastic houses². This is corroborated by the comments of John Stow in 1598 when he noted a Hebrew inscription on a block of masonry amongst repair works on Aldgate³.

A later northern tower was also identified projecting 7.3m from the city wall and overlying the earlier ditches. The associated boundary ditch was observed to butt-end before reaching the gate entrance suggesting that the later road leading into the city was constructed over solid ground, rather than via a bridge over an open moat as before. It is in the upper floors of this later medieval gate that Geoffrey Chaucer rented rooms between 1374-1386 when he was 'Comptroller of Customs and Subsidies of Wools, Skins and Hides in the Port of London'. It was this gate at which a uprising led by Thomas Fauconberg against Edward IV was halted in 1471 and through which the defenders pursued the enemy.

Aldgate was dominated by the presence of The Priory of the Holy Trinity, founded in 1108 by Mathilda, Queen of Henry I. This was the first Augustinian Priory founded in the City of London and was located on a huge triangular plot of land to the north-west of the gate. This Priory was dissolved in 1531 by Henry VIII and the land allotted to Lord Audley one of his supporters in opposition to Cardinal Wolsey. The Priory in its hey-day was extremely rich and had been granted such relics as a piece of the Holy Cross, been in charge of collecting taxes on the clergy, and owned land in no less than 92 London parishes.

² Thornbury,W, *Old and New London: Vol.2* pgs.245-50 (1878)

³ Schofield,J, *The Building of London: from the Conquest to the Great Fire*, pg.157 (1984)

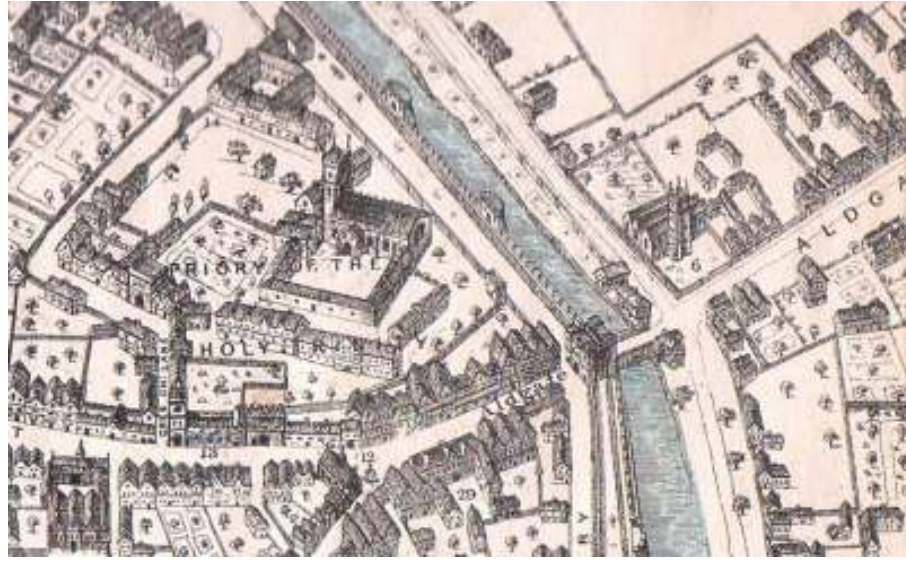


Fig.4: Extract from 'London in the time of Henry VIII', produced from sources, and created in 1855 by William Newton. Aldgate to the centre of frame

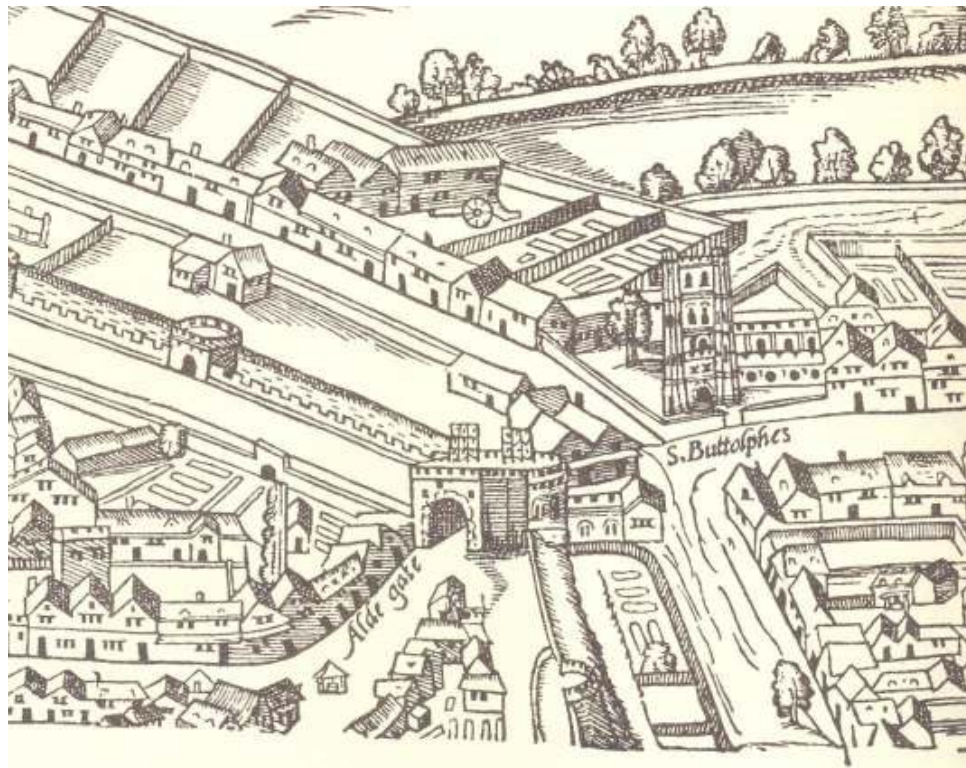


Fig.5: Extract from the 'Agas' Map, dated 1562

The 'Agas' Map, (see above), shows the Aldgate area post dissolution of Holy Trinity Priory. The outer defensive ditch has been filled in and properties with gardens / cultivation beds established in its place. St.Botolph's without Aldgate is now the dominant church within the area, and as such is given more prominence than on previous maps.

The area around Aldgate was also known as ‘Old Jewry’ due to the presence of a large Jewish community which had established itself within the city walls, south of the gate, from 1181 onwards. Their presence was continuous until 1290 when Edward I officially expelled all Jews from England, and they did not return until Oliver Cromwell invited them back into the country in 1650. They re-established themselves in the same area and expanded north of the gateway across the area of the former Priory of the Holy Trinity building several synagogues including the Great Synagogue, 1692, and ‘Bevis Marks’ in 1699, which remains till this day and so can be said to be the oldest Synagogue in the United Kingdom still in use.

Over the period 1530-1666 the area was increasingly developed boosted by an ever increasing population within the city and a subsequent grab for available land. Aldgate itself was remodelled in 1609 along with many of the City gates early in the reign of King James I, celebrating the new Stuart dynasty. The King himself was depicted on the exterior face with his royal supporters at his feet, flanked by Roman soldiers on the towers, whilst Fortune, Peace and Charity graced the city frontage.



Fig.6: Engraving of Aldgate after remodelling in 1609, (exterior face)

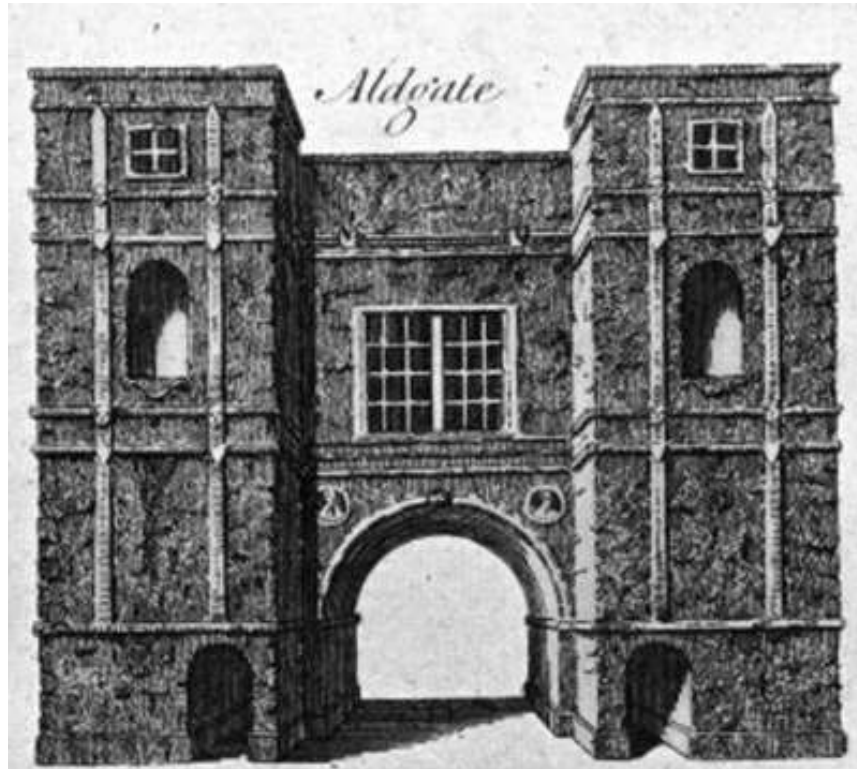


Fig.7: Interior face of Aldgate after 1609 remodelling, (facing towards the city), taken from an engraving c.1800



Fig.8: Aldgate c.1658 from William Newcourt's Survey, showing the results of increased development within the Aldgate area during the early 17th century.

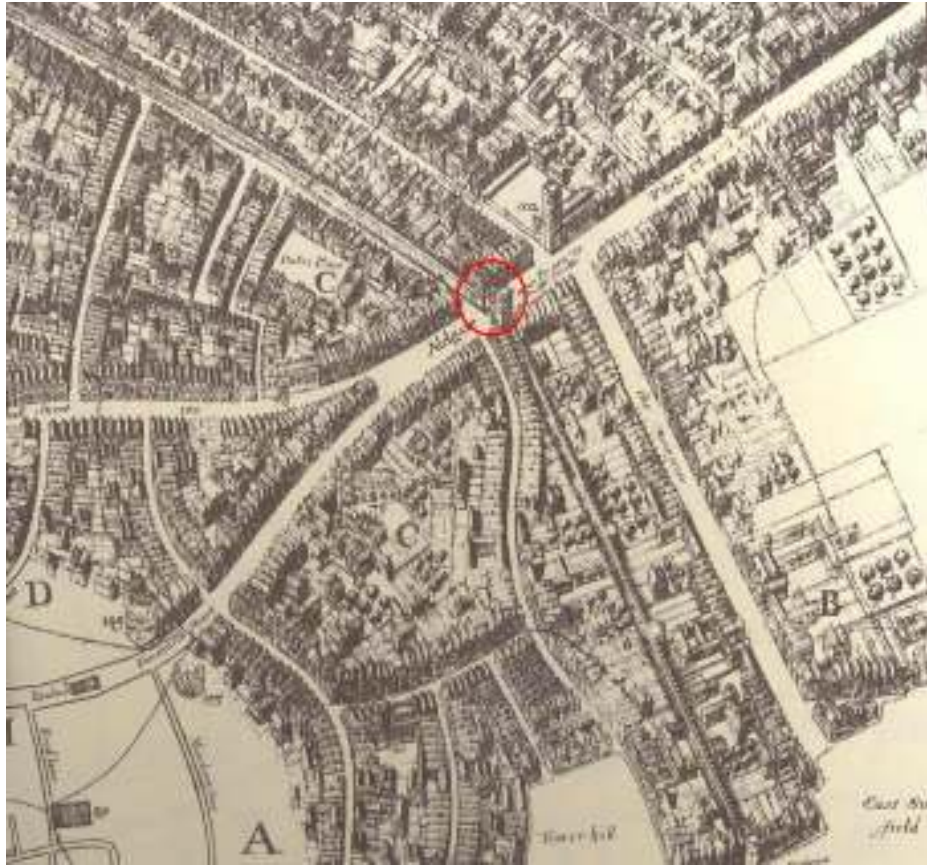


Fig.9: *Extract from Leakes' survey of the City after the Great Fire drawn in 1667*

The Great Fire of London stopped short of Aldgate, (see Fig.9 where the blank space in the bottom left of frame denotes extent of fire damage). But as a result of the fire the gate was temporarily used as a prison for the Poultry Compter until it could be rebuilt.

- 2.4 After the Great Fire the story of Aldgate area is similar to that of much of the City with further changes to the road layout, rebuilding of public buildings including churches and residences in brick and stone to prevent a similar fire taking hold.

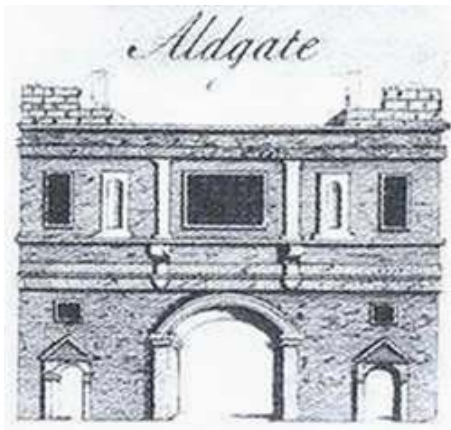


Fig.10: Aldgate ward from Jacob Ilive's 1739 survey showing the new, post-fire, road layout radiating from Aldgate

Bottom left shows an enlarged detail of Aldgate from the same survey, just over 20 years later it was demolished

With Georgian London becoming ever increasingly rich, and more and more trade passing through, the decision was made in 1761 to demolish all 6 of the City gates in order to ease congestion and traffic flow. However, unlike its contemporaries Aldgate would be given a new lease of life by a zealous antiquarian called Mussell who “purchased the antique and most valuable part of Aldgate, consisting of Roman, Runic, Saxon, Danish, Norman and English bricks, stones, bas reliefs, and sculptures, which he re-edified as an adjacent⁴” to his mansion which from then on was known as ‘Aldgate House’.

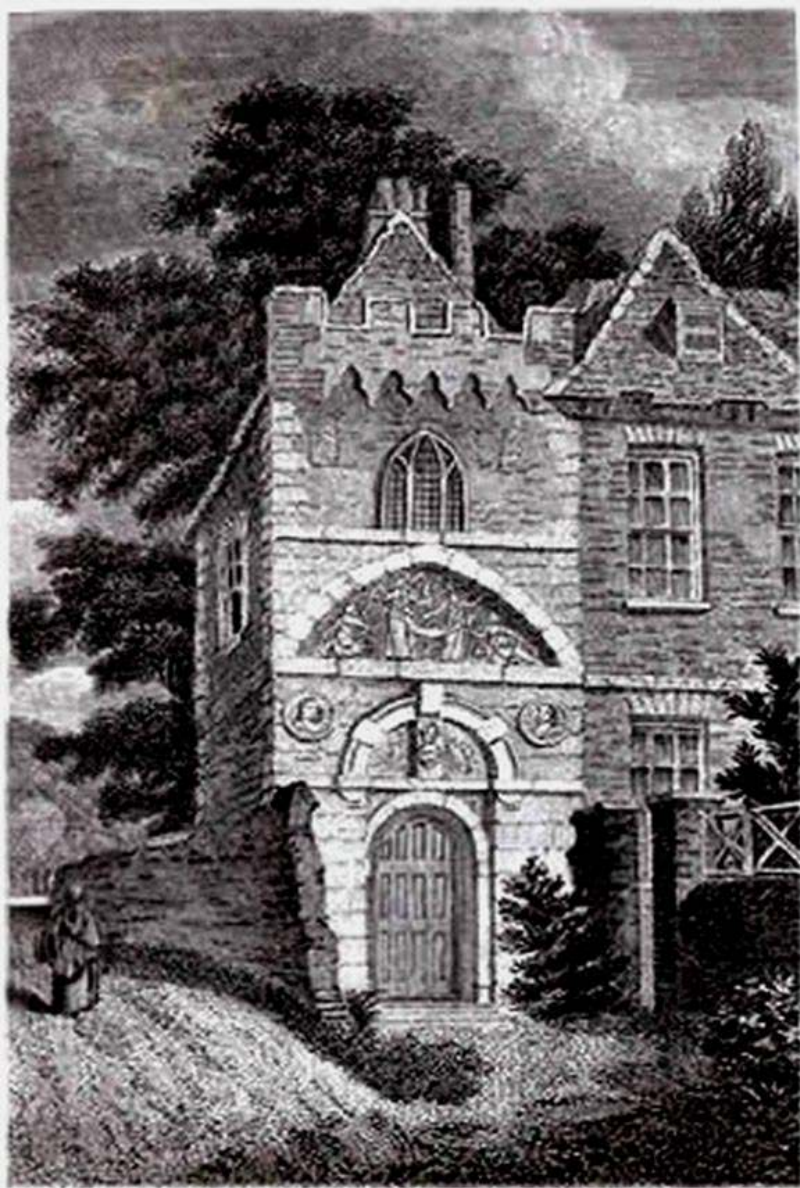


Fig.11: Woodcut of ‘Aldgate House’ c.1800 with elements of the 1607 Aldgate incorporated into the north face of the mansion to the left of frame

⁴ Quote taken from <http://www.oldlondonmaps.com/viewspages/0208.html>

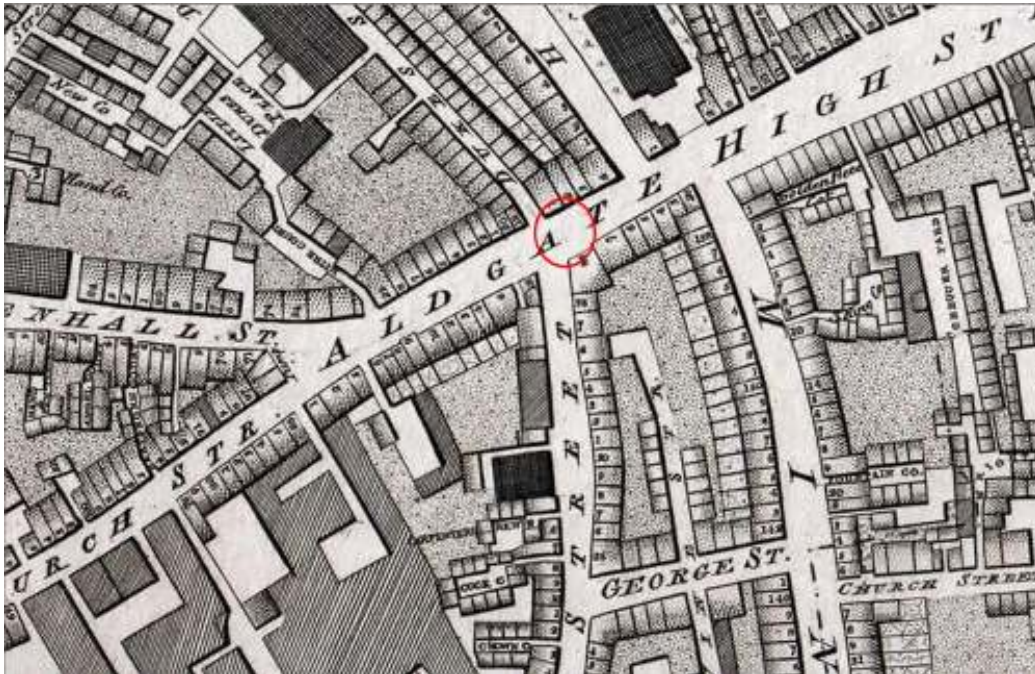


Fig.12: Extract from Horwood's plan 1792-99, post demolition of Aldgate. Note the pump at junction of Fenchurch Street and Leadenhall Street. It is from this pump that all mileages east of London are measured



Fig.13: Extract from the 1st Edition 25 inch Ordnance Survey Map, 1860s

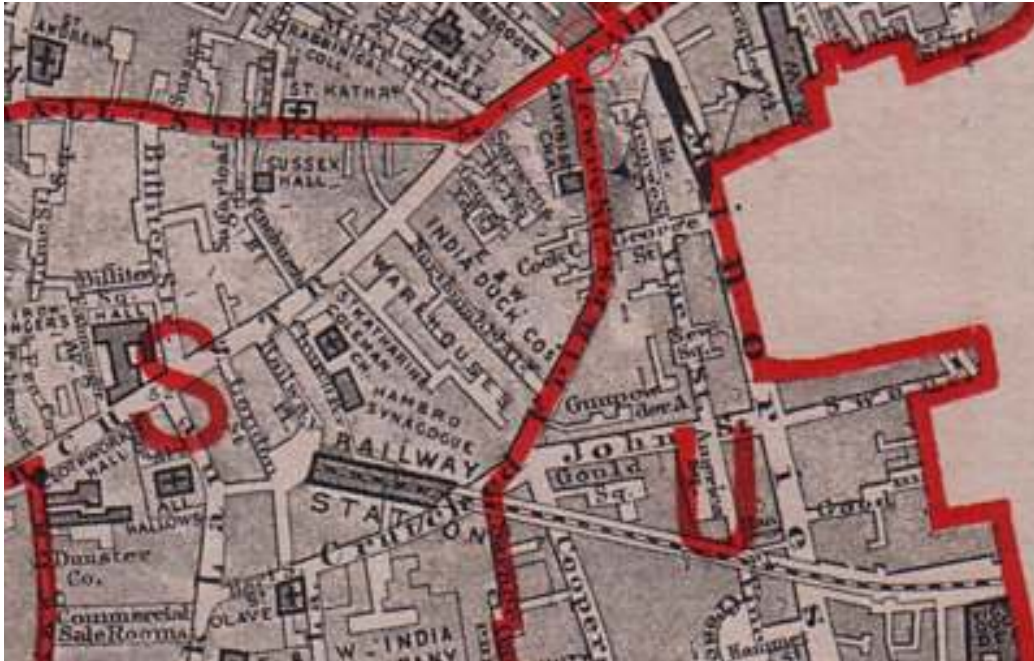


Fig.14: School board map of Aldgate Ward from 1872

The School board map of 1872 shows the area at the height of the Victorian age, with Fenchurch Street station in the bottom left, which had opened in 1841 and been rebuilt in 1854. Aldgate station was opened 4 years after this map was created, in 1876. There are also several synagogues labelled, including The Hambro and The Great Synagogue, along with a Rabbinical college on Mitre Street. This reflects the influx of Jewish refugees from Eastern Europe during the previous 50 year period. Mitre Square just off of Mitre Street was made famous in 1888 when Jack the Ripper murdered Catherine Eddowes here, his only murder committed within the boundary of the City.

3 Methodology

3.1 Standards

The fieldwork was carried out in accordance with current English Heritage guidelines (in particular, *Standards and Practices in Archaeological Fieldwork, Guidance Paper 3*), and to the standards of the Institute for Archaeologists ('IfA Standard and Guidance for Archaeological Watching Briefs'). Overall management of the project was undertaken by a full Member of the Institute.

3.2 Fieldwork

Archaeological deposits and features were investigated and recorded in stratigraphic sequence, and where appropriate finds and other dating evidence recovered. Archaeological deposits and features were recorded as appropriate on *proforma* trench sheets, and drawn in plan with measured sketches taken of sample sections. The investigations were recorded on a general site plan and related to the Ordnance Survey grid. The fieldwork record was supplemented as appropriate by digital photography.

3.3 Post-excavation works

The fieldwork was followed by off-site assessment and compilation of a report, and by ordering of the site archive.

Finds were treated in accordance with the appropriate guidelines, including the Museum of London's '*Standards for the Preparation of Finds to be permanently retained by the Museum of London*'. Finds and artefacts were retained and bagged with unique numbers related to the context record. Assessment was undertaken by appropriately qualified staff.

A short summary of the fieldwork has been appended to this report, (Part II Appendix C), in paragraph form suitable for publication within the 'excavation round-up' of the *London Archaeologist*, and using the OASIS data collection form,(Part II Appendix D).

4 Results

Between the 28th January and the 3rd February 2011 an open-cut trench measuring 14m long by 0.5m wide and 1.6m deep was observed in the southern carriageway, immediately east of the junction between Aldgate High Street and Jewry Street. The trench was aligned E-W and was generally straight except where it skirted round an inspection pit at the eastern end. This lies within the boundaries of the SAM (LO26K), reflecting the site of Aldgate.

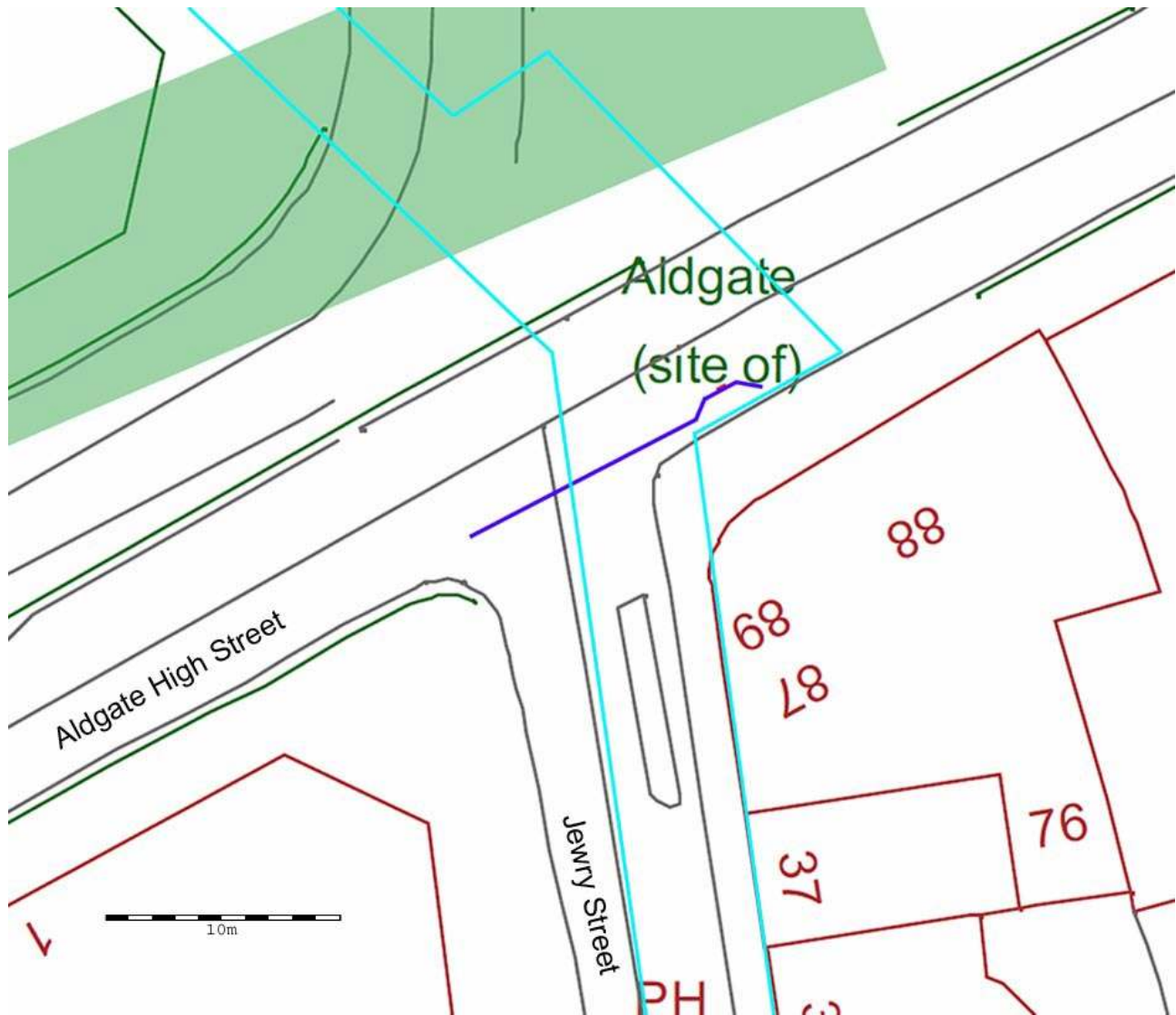


Fig.15: Location of remains of Aldgate in relation to current SAM location

The stratigraphy included the existing tarmac road surface atop a bed of concrete, (amounting to the top 0.60m of the trench), which overlay heavily disturbed and truncated made-ground deposits. These ranged from loose, grey gravels associated with several service pipes present within the upper portion of the trench, and deeper brown-orange silty-sands containing frequent small rounded pebbles and sub-angular stones, along with crushed brick and tile fragments.



Fig.16: *Shot of south section of trench along Aldgate High Street. Facing S*

Approximately 5m east of the junction with Jewry Street and 0.63m below the present ground surface in the north section of the trench was a portion of stone and brickwork. The block was aligned E-W in the section, sealed within the made ground deposits, and measured 0.65m across the top and 0.60m across the base of the trench. It survived to at least 9 courses of mixed brick and stone, which amounted to a total height of 0.97m, (though the brickwork continued below the base of the trench). It was constructed from red bricks, laid in a mix of stretchers and headers, with the occasional block of Reigate stone and chalk also present within the fabric. The Reigate stones on the western side of the wall appeared to have formed a rough face to the wall, while the eastern edge of the wall was more fragmentary, apparently having suffered a greater degree of truncation. The bonding material used was a hard yellow lime-mortar.



Fig.17: *Remains of Aldgate in north section of trench, facing N*

The deposits either side of the wall appeared to be heavily disturbed, loose, and as such were inferred to be relatively modern. The fact that it was not present in the southern section also implies truncation at a later date. The presence of so many service pipes in the vicinity would suggest that these fills and truncating episodes are related and that the wall had been damaged during earlier 20th century service installations.



Fig.18: Remains of Aldgate in north section of trench, facing NW. Note the blue-grey reigate stone in the bottom right, and far left of the structure and the single chalk block in top right corner



Fig.19: Reigate moulded stone re-used in Aldgate wall, (0.2m scale)



Fig.20: *Reigate moulded stone re-used in Aldgate wall, (0.2m scale)*



Fig.21: *Reigate moulded stone re-used in Aldgate wall, showing tool marks. (0.2m scale)*

5 Conclusions

The brickwork exposed is hard to interpret satisfactorily due to the limited scope of the trenching works and the piecemeal nature of the surviving remains. However it seems clear that it formed part of the upper surviving level of a N-S aligned wall; part of the SE corner or south side of Aldgate itself. The rough Reigate face-work to the west would also suggest that this section was originally at above contemporary ground level, visible to passersby. The bricks were identified as fabric type 3033 which dates them to between 1450-1700, and at least one piece of probably re-used reigate stone moulding was examined and retained⁵, (see figs.18-20 above). These facts would suggest that the brickwork formed part of the latest, 1607-1609 re-build of Aldgate. Without any further investigation little more can be said for sure without increasing levels of supposition. Nevertheless it does prove that important archaeological evidence does survive in the area and relatively close to the modern ground surface.



Fig.22: Wall in trenching looking towards St.Botolphs Without, facing NE

⁵ See Ceramic Building Material analysis, pg.46

II INTERIM REPORT: CROUCH HILL 55, (August 2010-November 2011)

Archaeological monitoring has continued on all mains replacement works across Crouch Hill 55 in the City of London and adjacent area of Tower Hamlets. Regular visits have been made to all sites where groundbreaking has occurred, and a standard written and photographic record taken where applicable. The majority of sites have exposed little of archaeological significance, usually consisting of intrusive service backfills and made-ground deposits.

This interim report follows on from Interim 30, which covers all archaeological monitoring undertaken in CH55, the City of London and London Borough of Tower Hamlets, from 8th June 2009 - 19th August 2010.

Aldgate (excluding detailed report I)

Due to its location within and close to the SAM LO26K Aldgate and Aldgate High Street were visited many times between 14th December 2010 and 5th July 2011. On the majority of occasions no archaeologically significant deposits were observed. Stratigraphy largely comprised the existing tarmac road surface overlying concrete bedding material and then a mix of dark-brown clay-silts containing brick and tile rubble, medium pebbles and sub-angular stones, representing successive dumps and levelling layers of made ground. Some were even associated with the creation of the underground lines which were dug as relatively shallow 'cut and cover' trenches around Aldgate station.

That said, several segments of 19th and early 20th century coal cellars were revealed on the 20th January 2011 in trenching on the southern side of Aldgate High Street, west of the junction with Minories, (see below).



Fig.23: Brick-built coal cellars and their associated coal-chutes for filling. Overhead view from North side of trench



Fig.24: *Brick coal-cellars on Aldgate High Street, facing W*

Segments of brick wall were also exposed on the North side of Aldgate High Street on the 27th June and 5th July 2011, aligned on a similar N-S axis as the east and west walls of St.Botolphs respectively. A single sherd of 13th century Kingston-type ware was recovered from a cessy fill at the base of trenching on the 27th July⁶. A large piece of sculpted limestone was retrieved from the made ground deposit within the trenching on 5th July, (see below). This may have been detritus associated with the rebuilding of St.Botolphs in the early 1740s



Fig.25: *Masonry from trenching on 5th July 2011*

⁶ See Pottery report, Appendix B, pg.54



Fig.26: Brick wall in west section of trenching on 5th July 2011, North side of Aldgate High Street



Fig.27: Brick, and one concrete capped, walls in trenching on 5th July 2011. Facing ESE

On the 14th December 2010 a small section of trenching measuring 12m long by 0.65m wide and up to 1.2m deep was opened on the SE corner of Minories and Aldgate High Street. A section of red brick and rubble masonry was observed 0.9m below the existing ground surface, sealed beneath a layer of pale brown sandy-clay. Apparently part of a N-S wall base, this was exposed for 0.7m in length and survived to a height of 0.46m. The masonry was bonded using a thick lime mortar resembling the rubble core of an external wall, with just a small patch of facing surviving on the north-western corner. Where it had been truncated to the south and west successive layers of levelling deposits / made ground were recorded making up the bottom 0.2m of the trench fill.



Fig.28: Masonry remains in trenching on Aldgate High Street, 14th December 2010, facing E

Samples taken from the brickwork dated the structure to between 1450-1700. The evidence from map regression suggests that the southern side of Aldgate High Street was relatively stable from an early date, with the northern side seeing more changes post dissolution of Holy Trinity. It is probably the northern side of the street that was cut back to widen the road, and this may then intimate that the presence of the wall in the existing southern carriageway may place the wall within an early medieval date range, in support of the dating from the brick samples. Its original function / form remain unclear. From the deposit below the base of the wall a single brick fragment was dated to between 140-250AD, placing it in the Roman period. This may have been a residual anomaly from deeper deposits or been re-used within the wall and has since been truncated / dislodged. The former explanation is more likely.



Fig.29: Masonry exposed in Aldgate High Street 14th December 2010, note facing by 0.5m scale and rubble core extending into section, facing N



Fig.30: *Architectural fragment within made ground 1st July 2011, Aldgate High Street*



The following architectural fragment was recovered from modern made ground observed within trenching along Aldgate High Street on the 1st July 2011. It probably once formed part of a building which stood on the site and may represent rubble from war damage in the area.

Billiter Street

Billiter Street was visited on a number of occasions between 22nd March and 22nd June 2011 encompassing four pits between 2-4m wide by 2.3-6m long, and a 33m stretch of open-cut trench on the east side of the street. The pits varied in depth from 1m –1.8m and the trench was dug to a maximum depth of 1m. All sections revealed similar stratigraphic sequences; modern tarmac road surface on a bed of concrete, (top 0.4m), overlying a mix of modern services amid their associated backfills or a mixed-brown sandy-silt containing pebbles, variable CBM and occasional charcoal flecking, (the bottom 0.6m+ of the pit/trenches). These deposits represent accumulated post medieval made-ground. Four sherds of pottery were recovered from the made ground deposits in the northern section of one of these pits, approximately 30m from the northern end of the street dating the deposit to the mid-late 17th century⁷.

The only other archaeologically significant remains encountered were the backs of at least 3 Victorian coal cellars exposed on the eastern side of Billiter Street within the open-cut trenching.



Fig.31: SE end of trench with exposed coal cellars to right of frame, 22nd March 2011

⁷ See Pottery Report, Appendix B, pg.54

Coopers Row

Between the 14th July and the 2nd of September 2011 the entire length of Coopers Row was monitored for archaeological remains, amounting to c.130m of open-cut trenching. The stratigraphy comprised the existing tarmac road surface atop a bed of concrete anywhere from 0.3m-0.6m in depth, overlying numerous existing services and the cast-iron Victorian water main. These in turn overlay various dumped clay-silt-sand materials containing frequent pebbles and CBM, oyster shell, peg-tile, occasional pottery and some patches of mortar. These layers amounted to the bottom 0.4m-0.9m of the trench.

On the 2nd September, in the final 30m of trenching towards Trinity Square, a lens of mortar and CBM rich material was observed aligned NE-SW across the base of the trench and measured approximately 1m thick by 0.25m+ in depth. Two fragments of peg tile retained from this deposit were dated to 1180-1550AD and 1480-1800AD respectively⁸. It may possibly represent some form of robbing activity, although there is no real clue as to what may have been present here to have been robbed. It could very well have been just another episode of dumping. The limited nature of the trench prohibits any definite interpretation.



Fig.32: *Mortar-rich deposit in base of trench, Cooper's Row, 2nd September 2011, Facing W*

⁸ See CBM analysis, pg.46



Fig.33: Mortar-rich deposit in base of trench, Cooper's Row, 2nd September 2011, Facing N

Cornhill

Visits were made to Cornhill between 21st of October 2010 and the 14th July 2011. No archaeologically significant deposits were observed in any of the open-cut trenches monitored during these works. Stratigraphy comprised the existing road surface of tarmac on top of a base of concrete up to 0.55m thick overlying numerous services and their associated backfills and / or recently made ground containing occasional crushed red-brick fragments, on occasion up to 0.9m and continuing below the base of the trench.

Crutched Friars

All monitoring visits to Crutched Friars resulted in a lack of archaeologically significant deposits being observed. Monitoring took place along the entire length of the street within trenches cut along the western and southern side of the street, and a large open-cut pit beneath the railway bridge. The underlying stratigraphy had been heavily truncated by modern services criss-crossing the area and so the only deposits exposed were associated with the backfills of these services; grey-brown gravels and silty sands.

Cullum Street

On the 22nd June 2011 a total of 40m of open-cut trenching was examined on the southern side of Cullum Street. Revealed stratigraphy included 0.25m of tarmac overlying a bed of concrete which overlay 0.7m of made-ground and service backfills. These were mainly sandy-silts of a dark brown colour containing rare fragments of CBM and rounded pebbles. A similar sequence was observed on the 27th July in a small pit opened in the centre of the street opposite no.8 Cullum Street.



Fig.34: Cullum Street, 22nd June 2011, facing W. Shot illustrating the presence of numerous services

East Smithfield

A total of 40.5m of open-cut trench was observed on the 19th October and the 26th October 2011. The trenching measured 0.5-0.8m wide by up to 0.8m deep and zigzagged along the northern side of the street opposite Royal Mint Court.

Despite its proximity to the site of the Abbey of St.Mary Graces, (1350-1539), just north of the trenching works, no associated deposits were revealed. This said, half a medieval glazed floor tile was recovered from the disturbed service backfill which dominated the trench, measuring 11.6cm long by 5.5cm wide and about 2.2cm thick. It has been identified as a <T43> 'Penn' tile, (so-named after the site of Penn in Buckinghamshire where the tiles were manufactured), and is therefore datable to c.1350-1390AD when the tilery was active⁹. It is likely that this tile would have once decorated a floor within the abbey grounds, either within the Abbey church itself, or another side chapel or ancillary building within its associated precinct. Considering the Abbey was only founded in 1350 this would make the tile an early, if not original feature in the site's history. Other evidence connected with the nearby Abbey included 3 large sherds of Late London ware pertaining to a jug base and a bunghole cistern, both dating to the 15th century¹⁰.



Fig.35: 'Penn' tile from East Smithfield

⁹ See CBM analysis, pg. 46 Also see *Grainger & Phillpotts*, (2011) pg.130-132, with special reference to fig.87

¹⁰ See Pottery report, Appendix B, pg.54



Fig.36: 'Penn' tile recovered from backfill of trench on East Smithfield (10cm scale)

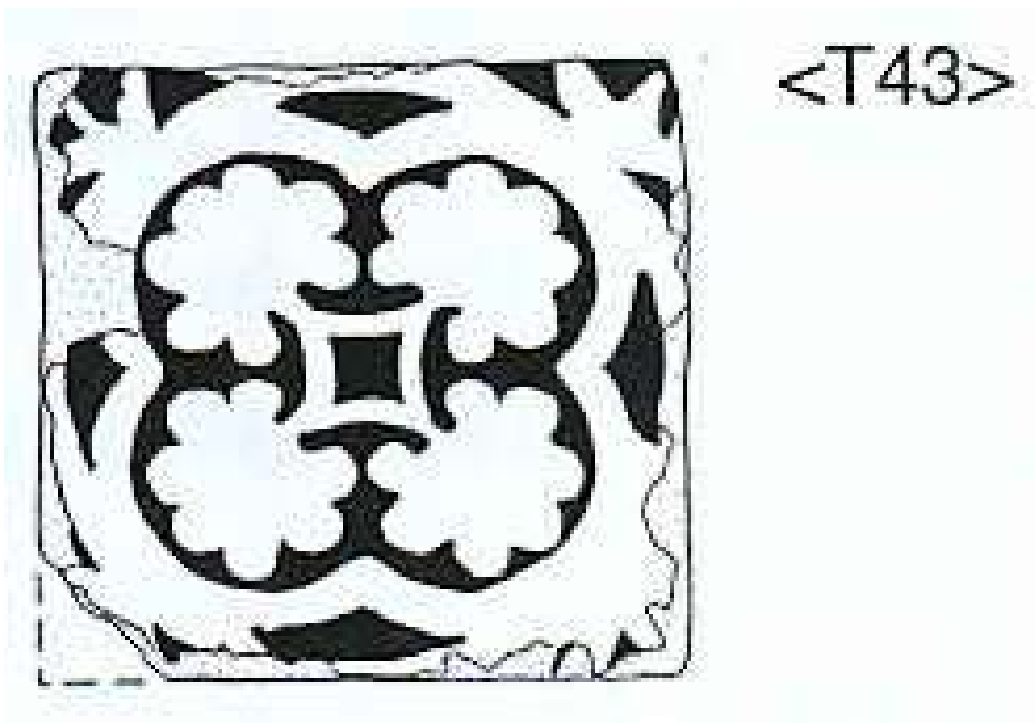


Fig.37: 'Penn' tile Type 43 as found during the excavations at St.Mary Graces, (image taken from Museum of London Archaeology Monograph 44, pg.131)



Fig.38: Reverse of 'Penn' tile from East Smithfield showing retained mortar bonding

No other archaeologically significant remains were observed.

Fenchurch Buildings

A 25m stretch of open-cut trench, 0.5m wide by 0.7m deep, was monitored along the length of Fenchurch Buildings passage. No archaeologically significant deposits were encountered; the stratigraphy comprised the existing road surface over a dark-brown silty-sand with large chunks of CBM, (brick and tile), representing modern cut and fill made-ground which covered concrete roofed basements, just visible in the base of the trench.

Fenn Court

Fenn Court was visited on five occasions between the 9th of September and the 3rd of November 2010. On the 16th of September a 33.5m stretch of trenching was open for investigation and at the far northern end part of a brickwork structure was observed 0.42m below the surface.

There were two elements to the structure, both aligned NW-SE across the full width of the trench, the southernmost measuring approximately 0.49m thick, and the northernmost not fully exposed due to the limit of excavation. These walls were separated by a 'cavity' 0.24m wide and with an arched roof. Within the cavity was a loose sandy fill partially excavated so that the depth of the cavity from roof to limit of excavation was 1.08m. It continued for 1.6m+ to the SE but was blocked at the NW end in section. The masonry comprised yellow stock brick with a shallow frog and stamp, bonded using a hard grey cement, suggesting a late 19th century date.

The south-west face of the southern wall was quite flat with flush pointing suggesting an exposed cellar wall, but with no signs of lime-washing to confirm this. Instead it may have formed some sort of drain or culvert.



Fig.39: 'Cavity' wall / drain in Fenn Court. Facing NE, (0.2m scale)



Fig.40: Inside of 'Cavity' wall / drain. Facing NW

On the 3rd November another stretch of wall, 4.5m long, was exposed in the base of a trench slightly further north on the western side of Fenn Court. The wall was aligned N-S composed of red bricks, irregularly coursed and bonded with a hard grey mortar, laid upon a bed of tiles, and supported at the south-eastern end by a thicker buttress-like patch of brickwork. The wall survived in section to at least 4 courses high, 0.33m, and 0.4m thick. Brick samples taken were dated to c.1650-1900AD and 1690-1800AD.



Fig.41: Brickwork in trench along trench, Fenn Court 3rd November 2010, Facing W

Houndsditch

A section of open-cut trench at the southern end of Houndsditch was monitored on the 9th August 2011. It was on the western side of the pavement aligned parallel with the side of St. Botolph's Church, and measured approximately 10m in length by 0.95m wide and up to 1.4m in depth.

This trench exposed a relatively complex / varied stratigraphy comprising at least six layers. Below 0.42m of tarmac road surface and reinforced concrete base was a grey-brown silty-sand with frequent pebbles and CBM at least 46cm thick. This overlay a thin but compacted layer of white lime-mortar, (30-50mm thick), lying over a black silt deposit of burnt material, 160-230mm thick, which also contained small rounded pebbles. This in turn overlay a 140mm thick deposit of mid-grey to grey-brown gravels containing ragstone chippings and rounded pebbles. The basal fills comprised orange gravels at least 150mm thick and a mid-brown silty-sand with occasional pebbles. These layers all appeared to slope slightly eastwards; did they form the fills within a much larger feature? A ditch or a pit? Or were they simply a series of metalling layers which represent previous ground surfaces. The latter seems more likely as the slope is minimal, and not so pronounced as to suggest tip lines, but rather a deliberate levelling of the area to create a more even surface.



Fig.42: West facing section at southern end of trench, Houndsditch, 9th August 2011

Leadenhall Street



Fig.43: Wall projecting into Leadenhall street on alignment with Hartshorn Alley, facing SW. 4th October 2011

Substantial remains of cellars / basements projecting north into Leadenhall Street were observed on the 4th and 11th October 2011. They were constructed of red brick, bonded with thick lime mortar or cement, and in sections showing signs of having been lime-washed on internal faces. One of the cellars had a concrete sloping roof, dropping back towards the frontages on Leadenhall Street. They dated to around the 19th to early 20th century and were of little archaeological interest or significance.



Fig.44: Concrete sloping roofed cellar recorded on Leadenhall Street, 11th October 2011, facing SSE



Fig.45: Sloping, concrete roof of cellar, facing SSW. Leadenhall Street 11th October 2011

Little Somerset Street

The whole length of Little Somerset Street was observed between 9th-25th November 2010, amounting to approximately 22m of trenching 0.45m-0.70m wide and up to 0.7m deep. The exposed stratigraphy comprised the tarmac and concrete road make-up layers and a mid-brown silty-sand containing frequent, rounded pebbles, charcoal flecking, and CBM to the base of the trench and beyond. The trenches were dug by hand and contained nothing of archaeological significance.

Lombard Street

41m of trenching was monitored on Lombard Street with visits taking place on the 4th and 19th October 2011. The trench was aligned N-S, parallel to the kerb-side, straddling the pavement at times, and the stratigraphy was very basic, made up of tarmac or paving stones on top of a concrete base and then immediately down into the existing services and their associated fills. No deposits of archaeological value were observed as the line of modern trenching almost unwaveringly followed the existing pipe trench.



Fig.46: Working shot of recording on Lombard Street, 4th October 2011, facing E

Mansell Street

Mansell Street was dominated by the presence of probable earlier cellars and basement structures associated with properties which once stood in the western part of the street before road widening took place in the post-war period.

Numerous elements of at least 4 basement style structures, some containing timber holes for possible floor joists, were observed in plan and section during monitoring on the 13th May 2011, in the southern part of Mansell Street between the corner with Goodman's Yard and Haydon Street. They were constructed using red brick bonded with coarse grey mortar and were present to within 0.51-0.60m of the existing ground surface, sealed beneath tarmac and concrete bedding material. The surviving brickwork was up to 7 courses high and continued below the base of the trench which was at least 1.2m deep. A single sherd of 'Ironstone' China was recovered from by one of these walls in the eastern section of the trench towards the northern end¹¹.

From brick samples taken the date provided for the structures is broadly speaking somewhere within the middle of the 17th century¹². Maps such as Morgan's Survey of London in 1682, and Rocque's map of 1742 show that there were buildings along this portion of Mansell Street by this time and so the basements could indeed have origins within the 17th century.



Fig.47: *Plan of trenches containing brick walls, 13th May 2011*

¹¹ See pottery report Appendix B, pg.55

¹² See CBM analysis, Appendix A, pg.46



Fig.48: Southern end of trench, 13th May 2011, with walls, and timber holes at the top of frame



Fig.49: *Mid section of trenching 13th July 2011, facing SSW, (0.5m scale)*



Fig.50: *Wall remains in centre of trench facing NNE, 13th July 2011*



Fig.51: *Timber holes in wall, detail of fig.49, facing NE, 13th July 2011, (0.5m scale)*



Fig.52: *Wall towards northern end of trenching, facing S, 13th July 2011*

A continuation of N-S brick walling was subsequently recorded to the north of the above remains; running for at least 40m north of Haydon Street. The wall was approximately 0.3m thick and again formed the frontage of cellars formerly to the west of Mansell Street.

On the 27th July 2011 further structures were unearthed on the south side of the western corner of Mansell Street with Aldgate High Street. These were within a trench 11.5m long by 0.5m wide and up to 1.2m deep. They included what looked like a brick floor, a blocked up soak-away or drain and a E-W aligned partition wall. To the north of the partition wall a spread of crushed brick and mortar rubble extended for 4.5m and on past the end of the trench. This spread is undeniably associated with the demolition of these former properties during the widening of Mansell Street in the mid 20th century.



Fig.53: Brick floor (left) and blocked up soak-away (right), at southern end of trenching, facing E, 27th July 2011



Fig.54: *Brick partition wall aligned E-W in the trenching, 27th July 2011, facing E*



Fig.55: *Brick and mortar rubble in northern end of trench, 27th July 2011.*

Minories

The Minories was visited just the once during this interim period, on the 25th August 2010. Beneath the existing road surface were numerous service cuts and the disturbed sandy-silts containing fragments of CBM which formed their backfill. The trench measured 12m in length and was up to 1m wide and 1.2m deep.

Nicholas Lane

25m of trenching was monitored during visits to Nicholas Lane between September and October 2010. The trenches measured approximately 0.45-0.5m wide by up to 1.05m in depth, and the observed stratigraphy comprised tarmac over a base of concrete 0.4m thick and below this sandy-silts associated with a buried electricity cable. No archaeologically significant deposits were noted.

Pope's Head Alley

On the 14th July open cut trenching, comprising the entire length of Pope's Head Alley was investigated. In a trench 15m long by 0.45m wide and 0.64m deep no archaeology was observed. The existing paving slabs sat on a bed of bright yellow builders sand, and stony gravels comprised the underlying deposits. The west section appeared to be concrete suggesting the adjacent buildings were basemented.



Fig.56: Pope's Head Alley, 14th July 2011. Facing N, concrete in west section visible in right of frame

St. Michael's Alley

A small section of wall was observed in a 9m trench along St. Michael's Alley on the 26th August 2011. The wall was 0.2m below the existing ground surface, sealed by crushed concrete and paving slabs and was exposed at an oblique angle within the southern section of the trench, aligned roughly E-W. It was constructed from brown and yellow stock bricks, visible to at least 9 courses and measured 2.9m long, disappearing into the section either side of the trench. It is most likely to have been the external face of a cellar wall associated with the adjacent property, (No.1 George's Yard), possibly 19th century.



Fig.57: Cellar wall exposed in trenching along St. Michael's Alley, 26th August 2011. View to W

The rest of the trench was made up of 19th/20th century backfill around a buried cast-iron water pipe.

St. Peter's Alley

St. Peter's Alley was visited on three occasions in September 2010, and the following observations made.

The first visit on the 17th September saw 3 small, (1m x 0.7m), connection pits opened to a depth of 0.5m and contained nothing but made ground below the existing paving slabs.

The second visit on the 21st recorded an open-cut trench aligned N-S alongside the wall of St. Peter's Cornhill graveyard for 8.33m. Below the existing paving slabs was a bedding layer of concrete, approximately 0.18m thick, sealing a dark-brown sandy soil probably representing disturbed ground associated with the construction of the adjacent graveyard wall. Part of the lower coursing and foundations of the graveyard wall were also exposed in the eastern section. These comprised a mix of yellow and red stock bricks bonded with a hard, coarse, grey mortar cement.



Fig.58: Graveyard Wall footings exposed on St. Peter's Alley, 21st September 2010. View to South-east

The third visit observed three 1m square connection pits which contained nothing but made-ground beneath the modern paving slabs.

Throgmorton Street

No archaeologically significant deposits were observed upon visiting Throgmorton Street. The monitoring took place on the 2nd August 2011 and revealed nothing but modern services and backfill.



Fig.59: *Throgmorton Street 2nd August 2011*

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Appendix A : Ceramic Building Material analysis by Susan Pringle

KEY: R= Roman; M= Medieval; PM= Post medieval; B= Brick; M= Mortar A= Abraded; Rd= Reduced; V= Vitrified; S= Sooted; H=Heat-cracked

Location	Interpretation	Context CBM date	Period	Fabric	Form	Count	Weight	L	B	TH	Condition	Comments
Aldgate High St	Brick wall – Probable part of Aldgate	1450-1700	P	3033	B	1	4843	220+	c.100	56	M, V	Large frag bricks and mortar. Near complete brick measured. All bricks are fabric 3033. One brick is cracked - vitrified?
Aldgate High St	Brick wall – Probable part of Aldgate	undated	M/PM	3107	Moulding	1	3453	0	0	0	M	Reigate stone moulding - from gateway?
Aldgate High St	E side of wall, upper course. Excavated 14/12/10	undated	R/M	3117	Flint	2	1590	0	0	0	M	Two flint nodules, flat knapped face on each. Roman or med?
Aldgate High St	E side of wall, upper course. Excavated 14/12/10	undated	R/M	3105	Rubble	2	1854	0	0	0	M	Mortared Kentish ragstone rubble, undated
Aldgate High St	W side of wall, brick sample. Excavated 14/12/10	1450-1700	P	3033	B	6	1375	0	120	60	M, Rd	Some conjoin, prob 1 brick. Heavily mortared. Brownish version of fabric - undrefired?
Aldgate High St	W side of wall, brick sample. Excavated 14/12/10	1450-1700	P	3039	B	1	1833	130+	130	c.56	M	Very heavily mortared. Prob early end of range - later 15th??

Location	Interpretation	Context CBM date	Period	Fabric	Form	Count	Weight	L	B	TH	Condition	Comments
Aldgate High St	W side of wall, brick sample. Excavated 14/12/10	1450- 1700	?	3105	Rubble	1	619	0	0	0	M, Rd	Roughly squared, small block Kentish ragstone rubble, mortared. Not dated
Aldgate High St	E side of wall. Brick & stone sample. Excavated 14/12/10	1450- 1700	M/P?	3039	B	1	1715	155+	129	c.57	M	Bedfaces obscured by mortar. Breadth suggests early in date range - late med/early p.med, later 15th c?
Aldgate High St	E side of wall. Brick & stone sample. Excavated 14/12/10	1450- 1700	M/P?	3039	B	3	1695	160+	128	62	M	Conjoin. Indented margin, faces heavily mortared. Early in date range. Cf DUK77 where bricks this size were dated to late 15th c.
Aldgate High St	E side of wall. Brick & stone sample. Excavated 14/12/10	1450- 1700	M/P?	3033	B	1	728	155+	0	c.58	M	Mortared faces. No dating evidence other than fabric
Aldgate High St	E side of wall. Brick & stone sample. Excavated 14/12/10	1450- 1700	?	3105	Rubble	1	323	120+	85+	23	M, Rd	Laminated fragment of Kentish ragstone, mortared
Aldgate High St	E side of wall. Brick & stone sample. Excavated 14/12/10	1450- 1700	?	3117	Flint	1	422	0	0	0		Knapped flint nodule, prob. From wall facing. Undated but likely to be medieval

Location	Interpretation	Context CBM date	Period	Fabric	Form	Count	Weight	L	B	TH	Condition	Comments
Aldgate High St	Layer under wall	1180- 1600,	R/M	2459b	B	1	366	0	0	30	A, Rd, M	Post-use wear abrasion on one end
Aldgate High St	Layer under wall	1180- 1600, resid R	M	2271	Roof tile	1	158	0	0	10	M	No nail-holes or glaze present
Aldgate High St	Layer under wall	1180- 1600, resid R	M	2271	Roof tile	1	0	0	0	12		No nail-holes or glaze present
Aldgate High St	Cessy basal fill to W of wall aligned with W wall of St Botolph Without	1480- 1800, resid R	PM	3032	B	1	602	65+	101	62	M	Lime wash on header. Sandy lime mortar with charcoal flecks. Creased stretchers - prob early in date range
Aldgate High St	Cessy basal fill to W of wall aligned with W wall of St Botolph Without	1480- 1800, resid R	R	2459B	Tegula	1	100	0	0	21	Rd	Part nail-hole visible set c.39mm from (top?) edge of tile
Aldgate High St	Cessy basal fill to W of wall aligned with W wall of St Botolph Without	1480- 1800, resid R	PM	2271	Roof tile	2	47	0	0	12	Rd, M	Probably peg tile
Aldgate High St	N-S wall on W side of St Botolphs	1450- 1700	PM	3033	B	1	592	0	105	65	M	Indented margin

Location	Interpretation	Context CBM date	Period	Fabric	Form	Count	Weight	L	B	TH	Condition	Comments
Aldgate High St	N-S wall on W side of St Botolphs Without	1450- 1700	PM	3033	B	1	402	0	0	60	M	
Aldgate High St	N-S wall on W side of St Botolphs	1450- 1700	PM	3033	B	1	717	0	0	0	M	Flake of brickwork with lime mortar
Coopers Row	Mortar deposit	1480- 1800	M	2271	Peg tile	1	124	0	0	11	Rd, M	1 side edge burnt, probably residual
Coopers Row	Mortar deposit	1480- 1800	PM	2276	Peg tile	3	322	0	0	12- 13	M	2 conjoin. Large nail holes, circular tending to polygonal; diam 15.5 - 16mm, tapering
East Smithfield	Service trench, N side of East Smithfield	1350- 1390?	M	1810?	Floor tile	1	223	116	55+	22	M, A	Two-colour decorated, Penn type <P81> Worn but not heavily abraded
East Smithfield	From service backfills, N side of East Smithfield	1630- 1900	PM	2275	Pan tile	3	549				S x 2, M	Includes nib on underside. Rectangular, c.90 x 130mm and c.9- 10mm high
Fenn Court	Bricks beneath drain housing - cellar wall?	1650- 1900	P	3032	B	1	2113	225	100	60	V, H	Distorted by vitrification, cracked surfaces
Fenn Court	Wall aligned N-S along base of trench	1690- 1800	P	3032	B	1	1979	213	213	61	M, Rd	Fine sanding, sharp arrises

Location	Interpretation	Context CBM date	Period	Fabric	Form	Count	Weight	L	B	TH	Condition	Comments
Fenn Court	Wall aligned N-S along base of trench	1690-1800	P	3034?	B	1	1590	165+	165+	62	M	Fabric ID not secure. Fine sanding, sharp arrises similar to 3032 brick. Very shallow frog, finger-made? c.5mm deep, so probably not pre-1690
Leadenhall Street	Wall, base and upper part	1750-1800	PM	3032?	B	1	2908	230	105	65	M, Rd	Shallow basal frog obscured by dark brown mortar. Mortared on all faces except one header, which is reduced
Leadenhall Street	Wall, base and upper part	1750-1800	PM	3032?	B	1	2198	225	107	66	A, M	Shallow basal frog, c.170mm x? x? (1 side missing. Dark brown mortar on bed face and 1 stretcher, other stretcher removed by concave cutaway
Leadenhall Street	Wall in Leadenhall St, opp Hartshorn Alley, part of alley wall	1650-1800	PM	3032	B	1	1582	174+	98	62	M	Unfrayed, lime washed on one stretcher. Header is creased. Sandy lime mortar with frequent charcoal flecks. Probably early in date range
Mansell Street	Brick sample from wall in part 3	1550-1700	PM	3039	B	1	2275	215	100	60	Rd, M	Burnt and distorted. Bedfaces have coarse lime mortar with flint (?) pebbles and charcoal and tile or daub flecks
Mansell Street	Brick samples from wall in part 3	1550-1700	PM	3033	B	2	2106	225	107	60	Rd, M	Burnt and distorted. Lime mortar is charcoal-flecked
Mansell Street	Brick sample from wall in part 3	1550-1700	PM	3033	B	1	636	68+	109	59	Rd, M	Reduced surfaces. Charcoal and Tile flecks in lime mortar

Location	Interpretation	Context CBM date	Period	Fabric	Form	Count	Weight	L	B	TH	Condition	Comments
Mansell Street	Brick from 1a (S part) - brick plinth aligned N-S along trench	1650-1900?	PM	3032?	B	1	2197	210-235	100	60-72	V, Rd, M	Distorted, either misfired or burnt in use. Charcoal flecks in mortar
Mansell Street	Brick sample from 1a (S part) - brick plinth - bricks over timber	1450-1700	PM	3039	B	1	2001	222	100	65	Rd, M	Lime mortar with charcoal on headers and stretchers. Trace of indented margin, but probably dates to 17th c.
Mansell Street	Brick sample from part 1c (S part) 2nd bit in E section	1450-1700?	PM	3039	B	1	2006	220	100	60	Rd, M	
Mansell Street	Brick samples from part 1d (S part) - brick in base of trench heading into W section	1450-1700	PM	3033?	B	2	2364	221	98	63	Rd, M, S	Reduced lime mortar with charcoal flecks on both bed faces and stretchers
Mansell Street	Brick samples from part 1e (S. part) aligned E-W across trench	1450-1700	PM	3033	B	2	2423	220	104	65	M, H?, V	conjoin. Indented margin. Mortar with charcoal on all faces. Possible heat-cracking on upper face, and fabric appears slightly vitrified.

Location	Interpretation	Context CBM date	Period	Fabric	Form	Count	Weight	L	B	TH	Condition	Comments
Mansell Street	Brick samples from part 1e (S. part) aligned E-W across trench	1600-1700?	PM	3033	B	2	2559	228	108	61	Rd, M, V	Conjoin. Brick is reduced and distorted, fabric vitrified. Lime mortar with charcoal.
Mansell Street	Brick sample from wall in part 2a - brick base? Wall turning round corner?	1550-1700	PM	3033?	B	1	2363	214	95	62	Rd, M	White shelly lime mortar (no charcoal) on bed faces and stretchers. 1 header has a build-up of re-deposited calc carb – limescale
Mansell Street	Brick samples from part 4b (N trench) - wall in E section	1550-1700	PM	3033	B	5	1863	228	111	59	M	conjoin. Indented margin; creased header/stretchers. Lime mortar with tile and some charcoal flecks.
Mansell Street	Brick sample from part 4b (N trench) - wall in E section	1450-1700	PM	3033	B	1	104	0	0	0	M, A	flake
Mansell Street	Brick sample from part 4 (N trench) - wall in E section (3rd from S)	1500-1600?	PM	3033	B	1	1963	229	105	60	M	creased stretchers; possible indented margin but obscured by lime mortar (no charcoal)

Location	Interpretation	Context CBM date	Period	Fabric	Form	Count	Weight	L	B	TH	Condition	Comments
Mansell Street	Brick sample, rectangular structure	1450- 1700	PM	3033	B	1	2585	220	106	57	M	Most surfaces obscured by mortar. Probably from later end of date range.
Mansell Street	floor?	1400- 1700	P	3033	B	1	1252	150+	107	65	M,A	Abraded surfaces; charcoal and tile- flecked lime mortar on bed-faces
Mansell Street	Wall in north section	1600- 1700	P	3033	B	1	1322	130+	117	63	M	Later version of fabric, 17th c. Mortar on all faces
Mansell Street	Tile frags from lighter deposit	1500- 1600?	M/PM	2271	Peg tile?	2	60	0	0	13		Conjoin. Rather thick for fabric 2271, but coarser sanding than 2276. Probably late med/early post-med - 16th c? Unglazed.

APPENDIX B: Pottery report for CH55 by Paul Blinkhorn

The pottery assemblage comprised 9 sherds with a total weight of 1,147g. It was all medieval or later. It was recorded using the fabric codes of the Museum of London post-Roman type-series (Vince 1985), as follows:

KING: **Kingston-type ware**, 1230 – 1400. 2 sherds, 10g.
 LLON: **Late London ware**, 1400-1500. 3 sherds, 985g.
 FREC: **Frechen Stoneware**, 1550 – 1700. 1 sherd, 31g.
 STSL: **Staffordshire slipware**, 1650 – 1800. 3 sherds, 10g.
 CHINA: **'Ironstone' china**, 1800-1900. 1 sherd, 111g.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. The wares are all common finds in London and its hinterland, and indicate that there was activity at the site throughout the medieval period. The large sherds of LLON are from a jug base and a bung-hole cistern.

Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Context	KING		LLON		FREC		STSL		CHINA		Date
	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	
110					1	31	3	10			M17thC
111	1	6									M13thC
112									1	111	19thC
113	1	4									M13thC
114			3	985							15thC
Total	2	10	3	985	1	31	3	10	1	111	

Bibliography

Vince, AG, 1985 The Saxon and Medieval Pottery of London: A review
Medieval Archaeology **29**, pgs. 25-93

APPENDIX C: London Archaeologist Summary

Site Address: Thames Water DMA Crouch Hill 55, City of London and London Borough of Tower Hamlets, with specific mention of Aldgate, EC2
Project Type: Watching Brief

Dates of Fieldwork: 19th August 2010 – 31st October 2011
Site Code: TMMO6
Site Supervisor: Compass Archaeology

NGR: TQ 335 811

Funding Body: Optimise

On the 3rd February 2011 an open-cut trench measuring 14m long by 0.5m wide and 1.6m deep was observed in the southern carriageway of the junction between Aldgate High Street and Jewry Street.

Exposed stratigraphy comprised the existing tarmac road surface atop a bed of concrete, (amounting to the top 0.60m of the trench), which overlay heavily disturbed and truncated made-ground deposits associated with several service pipes present within the upper portion of the trench, and deeper brown-orange silty-sands containing frequent small rounded pebbles and sub-angular stones, along with crushed brick and tile fragments.

Approximately 5m east of the junction with Jewry Street in the north section of the trench was a section of N-S aligned brick and stone wall base. The brickwork was aligned E-W in the section, sealed within the made ground deposits, 0.63m below the present ground surface, and measured 0.65m across its top and 0.60m across the base of the trench. It survived to at least 9 courses of stone and brick, which amounted to a total height of 0.97m, (though the brickwork continued below the base of the trench). It was constructed from red bricks, laid in a mix of stretchers and headers, with the occasional block of Reigate stone and chalk also present in the make-up. The Reigate stones on the western side of the wall appeared to have formed a rough face to the wall, while the eastern edge of the wall was more fragmentary, apparently having suffered a greater degree of truncation. The bonding material used was a hard yellow lime-mortar.

It is thought that this formed part of the structure of Aldgate itself, such as the surviving foundations of the gateway. Brick samples were identified as fabric type 3033 which dates them to between 1450-1700, and at least one piece of probably re-used reigate stone moulding was examined and retained. These facts would suggest that the brickwork formed part of the latest, 1607-1609 re-build of Aldgate. Without any further investigation little more can be said for sure, nevertheless it does prove that important archaeological evidence does survive in the area and relatively close to the modern ground surface.

Further segments of N-S, rubble built, walls were located on Aldgate High Street at the junction of Minories, and on the western side of Mansell Street extensive brickwork remains of coal cellars and basements were exposed and recorded. In trenching along East Smithfield half a fragment of medieval floor tile was recovered from backfill material and was linked to the neighbouring Abbey of St Mary Graces.

Archaeological monitoring has continued on all mains replacement works across Crouch Hill 55 in the City of London. Other than the above mentioned the majority of sites have exposed little of archaeological significance, revealing occasional remnants of brick walls and arched ceilings interpreted as 19th century coal cellars or otherwise comprising intrusive service backfills and post medieval made-ground deposits.

Appendix D: OASIS data collection form

OASIS ID: [compassa1-114737](#)

Project details

Project name	Thames Water replacement works: CH55 with especial mention to Aldgate
Short description of the project	<p>This document forms an interim report for the monitoring of Thames Water mains replacement works within the Crouch Hill 55 area between August 2010 and November 2011. In most areas these groundworks exposed little in the way of significant archaeology, revealing occasional remnants of brick walls and arched ceilings interpreted as 19th century coal cellars, along with accumulated post-medieval made-ground deposits. However, on the 3rd February 2011 a large segment of apparently N-S aligned brick and stone wall was revealed in the north section of a trench aligned E-W across the junction of Jewry Street and Aldgate High Street. The brickwork is thought to have been related to the 17th century Aldgate which once stood within the immediate vicinity. The structure was found 0.63m below the existing ground surface and survived to at least 0.97m in height, continuing beneath the base of the excavation. This report details the discovery and attempts to place the findings within their historical and cartographic context, as well as giving a summary of works and observations elsewhere within the CH55 area. Further segments of N-S, rubble built, walls were located on Aldgate High Street at the junction of Minories, and on the western side of Mansell Street extensive brickwork remains of coal cellars and basements were exposed and recorded. In trenching along East Smithfield half a fragment of medieval floor tile was recovered from backfill material and was linked to the neighbouring Abbey of St Mary Graces.</p>
Project dates	Start: 20-08-2010 End: 31-10-2011
Previous/future work	Yes / Yes
Any associated project reference codes	TMMO6 - Contracting Unit No.
Type of project	Recording project
Site status	Scheduled Monument (SM)

Current Land use	Transport and Utilities 1 - Highways and road transport
Current Land use	Transport and Utilities 3 - Utilities
Monument type	BRICK WALLS Post Medieval
Monument type	STONE AND MASONRY Post Medieval
Significant Finds	POT SHERDS Medieval
Significant Finds	POT SHERDS Post Medieval
Significant Finds	TEGULA Roman
Significant Finds	PEG TILE Medieval
Investigation type	'Watching Brief'
Prompt	Water Act 1989 and subsequent code of practice

Project location

Country	England
Site location	GREATER LONDON CH55 City of London East, and London Borough of Tower Hamlets
Postcode	EC2 AND EC3
Study area	75.00 Hectares
Site coordinates	TQ 332 814 51.5153010071 -0.08013481833530 51 30 55 N 000 04 48 W Point
Site coordinates	TQ 338 810 51.5115639530 -0.07164387982910 51 30 41 N 000 04 17 W Point
Site coordinates	TQ 333 806 51.5080874364 -0.07899688481530 51 30 29 N 000 04 44 W Point
Site coordinates	TQ 327 811 51.5127227022 -0.08745015201680 51 30 45 N 000 05 14 W Point

Project creators

Name of Organisation Compass Archaeology

Project brief originator City Archaeologist

Project design originator Compass Archaeology

Project director/manager Compass Archaeology

Project supervisor Compass Archaeology

Type of sponsor/funding body Water utility/company

Project archives

Physical Archive recipient Museum of London Archive

Physical Contents 'Ceramics','other'

Digital Archive recipient Museum of London archive

Digital Contents 'other'

Digital Media available 'Images raster / digital photography','Spreadsheets','Survey','Text'

Paper Archive recipient Museum of London Archive

Paper Contents 'other'

Paper Media available 'Drawing','Map','Miscellaneous Material','Notebook - Excavation',' Research',' General Notes','Plan','Report','Survey','Unpublished Text'

**Project
bibliography 1**

Publication type	Grey literature (unpublished document/manuscript)
Title	THAMES WATER MAINS REPLACEMENT WORKS Interim Report 34: CROUCH HILL 55, City of London and London Borough of Tower Hamlets (August 2010-November 2011) including The recording of exposed remains of AI
Author(s)/Editor(s)	Aaronson, J
Date	2011
Issuer or publisher	Compass Archaeology
Place of issue or publication	5-7 Southwark Street
Description	Report of the results of the watching brief. Includes historical and archaeological background of the site, details of the methodology used, photographs and descriptions of all trenches monitored, and brief conclusions reached. Contains detailed section on remains of Aldgate recorded in February 2011
Entered by	James Aaronson (james.aaronson@gmail.com)
Entered on	29 November 2011